

REMARKS

Claims 1-3, 5 and 8-13 and 15-21 are pending in this application. Claims 13 and 15-21 are withdrawn from consideration. By this Amendment, claims 1, 15 and 20 are amended and find support in the specification as filed at page 13, lines 16-21 and page 14, lines 2-13. Claim 13 is amended to incorporate the subject matter of claim 14 and finds support in the specification as filed at page 13, lines 16-21 and page 14, lines 2-13. Claims 14 and 22 are canceled. No new matter is added by this amendment.

The courtesies extended to Applicants' representative by Examiner Arciero and Supervisory Examiner Tuan at the interview held September 8, 2009, are appreciated. The reasons presented at the interview as warranting favorable action are incorporated into the remarks below, which constitute Applicants' record of the interview.

I. May In View Of Breault

The Office Action rejects claims 1-3, 5, 8-9 and 11-12 under 35 U.S.C. §103(a) as allegedly being unpatentable over U.S. Patent Application Publication No. 2001/0021470 ("May") in view of U.S. Patent No. 6,020,083 ("Breault"). Applicants respectfully traverse this rejection.

May discloses a fuel cell comprising at least two bipolar or separator plates, a membrane electrode assembly disposed between the plates, a current-collecting means, means to feed gaseous hydrogen fuel to the anodes and means to feed an oxygen-containing gas to the cathode. May, paragraphs [0015-0020]. May further discloses a humidifying section between fuel cell units and one of the end plates for the introduction of water vapor into the fuel and oxidant streams fed to the stack. May, paragraph [0081]. However, May fails to describe all of the features recited in claim 1.

May does not describe a fuel cell disassembly method comprising supplying a specific fluid to at least one of the oxidizing gas conduit and the fuel gas conduit to facilitate

separation of the electrode assembly from the pair of separators, wherein the specific fluid comprises one or more members selected from the group consisting of one or more organic solvents and liquid water.

May discloses introducing water vapor into the fuel and oxidant streams. May, paragraph [0081]. However, May fails to disclose (1) liquid water, (2) one or more organic solvents or (3) the use of any material for the disassembly of a fuel cell, as recited in claim 1.

Breault fails to remedy the deficiencies of May. Breault discloses a membrane electrode assembly for PEM fuel cells wherein the gas diffusion layers are coated with a sealant on respective sides thereof, and wherein a seal is disposed about the peripheral edge of the cathode bi-layer. Breault, Abstract, and column 5, lines 38-41. However, Breault fails to remedy the deficiencies of May, at least because Breault fails to describe a fuel cell disassembly method comprising supplying a specific fluid to at least one of the oxidizing gas conduit and the fuel gas conduit of a fuel cell, wherein the specific fluid comprises one or more members selected from the group consisting of one or more organic solvents and liquid water.

Further, May, alone or in combination with Breault, fails to provide any reason or rationale that would have led one of ordinary skill in the art to have attempted a fuel cell disassembly method comprising supplying a specific fluid to at least one of the oxidizing gas conduit and the fuel gas conduit of a fuel cell, wherein the specific fluid comprises one or more members selected from the group consisting of one or more organic solvents and liquid water.

Therefore, May and Breault, whether taken separately or together, fail to render obvious claims 1-3, 5, 8-9 and 11-12. Withdrawal of the rejection is respectfully requested.

II. May In View Of Breault And Iwase

The Office Action rejects claim 10 under 35 U.S.C. §103(a) as allegedly being unpatentable over May in view of Breault and further in view of U.S. Patent No. 5,718,984 ("Iwase"). Applicants respectfully traverse this rejection.

For at least the reasons discussed above, May and Breault fail to render obvious independent claim 1. Thus, May and Breault also fail to render obvious dependent claim 10.

Iwase does not remedy the deficiencies of May and Breault. Iwase describes a method of recovering the electrolyte membrane from a fuel cell, the method including peeling first the cathode, then the anode, from the electrolyte membrane wall as the apparatus is being soaked in methanol. Iwase, Abstract, and column 9, lines 15-25. Claim 10, however, recites an external force applied in directions of parting the pair of separators from each other during the step of providing a fluid supply for disassembly of the fuel cell. Claim 10, therefore, recites a method of parting the separators of a fuel cell, not the individual components of the membrane electrode assembly, as is discussed in Iwase. For at least this reason, Iwase does not describe the method of claim 10, and thus fails to remedy the deficiencies of May and Breault with respect to claim 10.

Further Iwase fails to describe a fuel cell disassembly method comprising supplying a specific fluid to at least one of the oxidizing gas conduit and the fuel gas conduit of a fuel cell, wherein the specific fluid comprises one or more members selected from the group consisting of one or more organic solvents and liquid water, as recited in claim 1, from which claim 10 depends. Thus, for this additional reason, Iwase fails to remedy the deficiencies of May and Breault.

Therefore, May, Breault and Iwase, whether taken independently or together, fail to render obvious claim 10. Withdrawal of the rejection is respectfully requested.

III. Rejoinder Of Claims

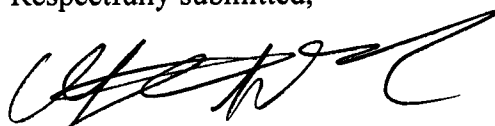
Rejoinder of claims 13 and 15-21 is respectfully requested.

IV. Conclusion

In view of the foregoing, it is respectfully submitted that this application is in condition for allowance. Favorable reconsideration and prompt allowance of claims 1-3, 5, 8-13 and 15-21 are earnestly solicited.

Should the Examiner believe that anything further would be desirable in order to place this application in even better condition for allowance, the Examiner is invited to contact the undersigned at the telephone number set forth below.

Respectfully submitted,



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